

CLAIMS:

1. A 28 kDa protein which is reactive with antibodies raised to Brucella species have a sequence of at least 90 amino acids from the sequence:

Met Asn Thr Arg Ala Ser Asn Phe Leu Ala Ala Ser Phe Ser Thr Ile  
Met Leu Val Gly Ala Phe Ser Leu Pro Ala Phe Ala Gln Glu Asn Gln  
Met Thr Thr Gln Pro Ala Arg Ile Ala Val Thr Gly Glu Gly Met Met  
Thr Ala Ser Pro Asp Met Ala Ile Leu Asn Leu Ser Val Leu Arg Gln  
Ala Lys Thr Ala Arg Glu Ala Met Thr Ala Asn Asn Glu Ala Met Thr  
Lys Val Leu Asp Ala Met Lys Lys Ala Gly Ile Glu Asp Arg Asp Leu  
Gln Thr Gly Gly Ile Asn Ile Gln Pro Ile Tyr Val Tyr Pro Asp Asp  
Lys Asn Asn Leu Lys Glu Pro Thr Ile Thr Gly Tyr Ser Val Ser Thr  
Ser Leu Thr Val Arg Val Arg Glu Leu Ala Asn Val Gly Lys Ile Leu  
Asp Glu Ser Val Thr Leu Gly Val Asn Gln Gly Gly Asp Leu Asn Leu  
Val Asn Asp Asn Pro Ser Ala Val Ile Asn Glu Ala Arg Lys Arg Ala  
Val Ala Asn Ala Ile Ala Lys Ala Lys Thr Leu Ala Asp Ala Ala Gly  
Val Gly Leu Gly Arg Val Val Glu Ile Ser Glu Leu Ser Arg Pro Pro  
Met Pro Met Pro Ile Ala Arg Gly Gln Phe Arg Thr Met Leu Ala Ala  
Ala Pro Asp Asn Ser Val Pro Ile Ala Ala Gly Glu Asn Ser Tyr Asn  
Val Ser Val Asn Val Val Phe Glu Ile Lys.

2. A composition of matter comprising protein of claim 1 attached to a support.

3. A composition of matter comprising a protein of claim 1

attached to an antibody.

4. A composition of matter comprising a protein of claim 1 and a pharmaceutically acceptable carrier.

5

5. A composition of matter of claim 3 wherein the antibody is attached to a solid support.

10

6. A composition of claim 5 wherein the support is a nitro-cellulose strip.

7. An antibody which reacts selectively with the protein of claim 1.

15

8. A composition of matter comprising at least one antibody of claim 7 in a carrier.

9. A composition of claim 4 containing, additionally, an adjuvant.

20

10. A method of raising antibodies against Brucella species in a mammal susceptible to brucellosis by administration of an immunogenic effective amount of a protein of claim 1.

25